



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Applicant: Richard A. Craig, and Anthony J.  
Peurrung.

S. N.: 09/771,064

Filed: 01/26/2001

For: METHOD AND APPARATUS FOR THE  
DETECTION OF HYDROGENOUS  
MATERIALS.

)  
Art Unit: 3641  
)  
Examiner: Rick Palabrica  
)  
Paper No: NA  
)  
Confirmation No: 2684  
)  
Our Ref. No: E-1825 CIP  
)  
Date: 9/19/2002

Box NON-FEE AMENDMENT

Commissioner of Patents  
Washington, DC 20231

**RECEIVED**

OCT 03 2002

**GROUP 3600**

Dear Sir:

Responsive to the Office Action mailed 08/27/2002, the applicant submits the following remarks in reference to the Examiner's Notice of Restriction/Election.

Remarks

1. The Examiner has required a restriction to one of the following inventions per 35 U.S.C. §121:

- I) Claims 1-15, drawn to an **apparatus**, classified in class 376, subclass 153, or
- II) Claims 16-24, drawn to a **process**, classified in class 376, subclass 159.

The Applicant acknowledges the restriction requirement and elects without traverse the Group I claims 1-15, drawn to an **apparatus**, classified in class 376, subclass 153. Accordingly, the Applicant respectively requests cancellation of the group II process claims (16-24) to begin examination of the elected claims on the merits. The Applicant retains the right under 35 U.S.C.

§121 to file a future divisional application for the Group II process claims restricted in the current action.

2. The Examiner has also required an election under 35 U.S.C. §121 of a single species of the number and type of discriminator setting for purposes of examination.

Per 37 CFR 1.141(a), the Applicant understands that because the generic Group I claim (currently claim 1) has not yet been held to be unpatentable, all Group I claims (1-15) remain in the application pending review on the merits. In view of the Examiner's requirement, the Applicant hereby elects the discriminator species of claim 3, i.e., with at least one pulse-height discriminator setting.

3. The Examiner has also required an election under 35 U.S.C. §121 of one of the disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. In response, the Applicant elects the species of claim 7, i.e., wherein the neutron sensor comprises a coded-array aperture.

4. The Examiner has further required an election under 35 U.S.C. §121 to a single species of the neutron source for purposes of examination, due to the wide range of neutron sources disclosed and claimed as being suitable. In response, the Applicant elects the species of claim 8, i.e., wherein said neutron source is selected from the group consisting of a fission source, an (alpha, n) source, a (gamma, n) source, and combinations thereof

5. The Examiner has further required an election under 35 U.S.C. §121 to a single species of the neutron sensor for purposes of examination, due to the wide range of neutron sensors disclosed and claimed as being suitable. In response, the Applicant elects the species of claim 11, i.e., wherein said neutron sensor comprises a material selected from the group consisting of <sup>3</sup>He, <sup>10</sup>B, <sup>6</sup>Li, and combinations thereof.

6. The Examiner has further required an election under 35 U.S.C. §121 to a single species of neutron shield material for purposes of examination, due to the wide range of neutron sensors disclosed and claimed as being suitable. The Applicant elects the species of claim 13, i.e., wherein said neutron shield comprises a material selected from the group consisting of <sup>10</sup>B, <sup>6</sup>Li, and combinations thereof.

7. As the Group 1 invention claims have been elected in this action, no further action is required under item 7.

8. Consonant with the current requirement, the Applicant has elected species as required by the Examiner. The Applicant respectfully submits that no changes in inventorship have occurred as a consequence of the current restriction or election requirements, in compliance with 37 C.F.R. §1.48(b).

CLOSURE

Applicant has made an earnest attempt to respond in a proper manner to the Examiner's requested actions in this case. Should the Examiner identify any further requirements, he is invited to contact the undersigned for resolution thereof. Applicant respectfully requests that a timely movement toward Allowance be made in this case.

Respectfully submitted,



Stephen R. May  
Reg. No. 29,255

Stephen R. May (K1-53)  
Intellectual Property Services  
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# OFFICE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$)  
0.00

## Complete If Known

Application Number	09/771,064
Filing Date	01/26/2001
First Named Inventor	Craig, et al.
Examiner Name	Rick Palabrica
Group Art Unit	3641
Attorney Docket No.	E-1825 CIP

## METHOD OF PAYMENT

1.  The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number

02-1275

Deposit Account Name

Battelle Memorial Institute

 Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 Applicant claims small entity status. See 37 CFR 1.272.  Payment Enclosed: Check     Credit card     Money Order     Other

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description	Fee Paid
101	740	201	370 Utility filing fee	
106	330	206	165 Design filing fee	
107	510	207	255 Plant filing fee	
108	740	208	370 Reissue filing fee	
114	160	214	80 Provisional filing fee	

SUBTOTAL (1) (\$)  
0.00

## 2. EXTRA CLAIM FEES

Total Claims	Independent Claims	Multiple Dependent	Extra Claims	Fee from below	Fee Paid
			-20** =	X	=
			- 3** =	X	=

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description
103	18	203	9 Claims in excess of 20
102	84	202	42 Independent claims in excess of 3
104	280	204	140 Multiple dependent claim, if not paid
109	84	209	42 ** Reissue independent claims over original patent
110	18	210	9 ** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee (\$)	Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for ex parte reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)  
0.00

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Stephen R. May	Registration No. (Attorney/Agent)	29,255	Telephone	509 375-2387
Signature	<i>Stephen R. May</i>			Date	<i>Sept 19, 2001</i>

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## CERTIFICATE OF MAILING

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Dear Sir:

The undersigned hereby certifies that the attached:

- [ X ] Notice of Restriction Response to Office Action mailed 8/27/2002  
[ X ] Fee Sheet (2 ea.)  
[ X ] Return Receipt Postcard

are being deposited with the United States Postal Service as:

- [ X ] First Class Mail  
[ ] Express Mail - Label

in an envelope addressed to Box NON-FEE Amendment, Commissioner for Patents,  
Washington, DC 20231, on the date set forth below.

Rebecca B. Rupp  
Signature  
September 20, 2002  
Date Deposited

Rebecca B. Rupp K1-53  
Intellectual Property Services  
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